CONTENTS

NUMBER 1

ETHAN S. DEVINATZ and MICHAEL J. HOPKINS: Homotopy fixed point spectra for closed subgroups of the Morava stabilizer groups 1

JÉRÔME E. LOS and ZBIGNIEW H. NITECKI: Embedding groups of graph automorphisms in surfaces. 49

GREG FRIEDMAN: Intersection Alexander polynomials 71

JAMES CONANT and PETER TEICHNER: Grope cobordism of classical knots 119

ARTHUR BARTELS, TOM FARRELL, LOWELL JONES and HOLGER REICH: On the Isomorphism Conjecture in algebraic K-theory 157

MASAHARU ISHIKAWA: Tangent circle bundles admit positive open book decompositions along arbitrary links 215

BRUCE SOLOMON: Projecting $(N-1)$-cycles to zero on hyperplanes in $\mathbf{R}^{N+1}$ 233

M. GHOMI: A smooth convex loop with vanishing projections 245

NUMBER 2

ANDRÉ DE CARVALHO and TOBY HALL: Braid forcing and star-shaped train tracks 247

TARO ASUKE: Localization and residue of the Bott class 289

YING-QING WU: Immersed essential surfaces and Dehn surgery 319

NATHALIE WAHL: Infinite loop space structure(s) on the stable mapping class group. 343

C. BONATTI, V. GRINES, V. MEDVEDEV and E. PÉCOU: Topological classification of gradient-like diffeomorphisms on 3-manifolds 369

INKANG KIM: Rigidity on symmetric spaces 393

KIM A. FRØYSHOV: An inequality for the h-invariant in instanton Floer theory 407

MARCO BRUNELLA: Complete polynomial vector fields on the complex plane 433

LINDA KEEN and CAROLINE SERIES: Pleating invariants for punctured torus groups 447

Y. FELIX, S. HALPERIN and J.-C. THOMAS: Torsion primes in loop space homology 493

NUMBER 3

STELIOS KOUNDOUROS: Universal surgery bounds on hyperbolic 3-manifolds 497

ELMAS IRMAK: Superinjective simplicial maps of complexes of curves and injective homomorphisms of subgroups of mapping class groups 513

MOIRA CHAS: Combinatorial Lie bialgebras of curves on surfaces 543

TILMAN BAUER: p-compact groups as framed manifolds 569

SÍLVIA ANJOS and GUSTAVO GRANJA: Homotopy decomposition of a group of symplectomorphisms of $S^2 \times S^2$ 599

MIHAI TIBĂR: Vanishing cycles of pencils of hypersurfaces 619

ANDRZEJ WEBER: Pure homology of algebraic varieties 635

A.J. BAKER and J.P. MAY: Minimal atomic complexes 645

MANFRED STELZER: Hyperbolic spaces at large primes and a conjecture of Moore 667

FRANCISCO DUTENHEFNER and NIKOLAY GUSEVSKII: Complex hyperbolic Kleinian groups with limit set a wild knot 677

WILLIAM BASENER: Knots and topologically transitive flows on 3-manifolds 697

TERUHIKO SOMA: Existence of least area planes in hyperbolic 3-space with co-compact metric 705

BERNHARD HANKE: Realization of equivariant chain complexes 717

ADAM S. SIKORA: Torus and $\mathbb{Z}/p$ actions on manifolds 725

NUMBER 4

CHRISTOPHE EYRAL: Fundamental groups of singular quasi-projective varieties 749

BERTRAND TOËN and GABRIELE VEZZOSI: A remark on K-theory and S-categories 765

ALEKSEY ZINGER: Enumeration of one-nodal rational curves in projective spaces 793

O. GARCÍA-PRADA and I. MUNDET I RIERA: Representations of the fundamental group of a closed oriented surface in $\mathrm{Sp}(4, \mathbb{R})$. 831

D. BLANC, W.G. DWYER and P.G. GOERSS: The realization space of a Π-algebra: a moduli problem in algebraic topology 857

YUKIHIRO TSUTSUMI and HARUMI YAMADA: Variation of the Alexander–Conway polynomial under Dehn surgery 893

OLIVER BAUES: Infra-solvmanifolds and rigidity of subgroups in solvable linear algebraic groups 903

JAVIER FERNÁNDEZ DE BOBADILLA: Relative morsification theory 925

NUMBER 5

CORNELIA DRUŢU: Filling in solvable groups and in lattices in semisimple groups 983

GRIGORY MIKHALKIN: Decomposition into pairs-of-pants for complex algebraic hypersurfaces 1035

PATRICK DEHORNOY: Disks in trivial braid diagrams 1067

MAURICIO D. GARAY: An isochore versal deformation theorem 1081

MARCO SCHLICHTING: Delooping the K-theory of exact categories 1089

SØREN GALATIUS: Mod p homology of the stable mapping class group . 1105

A. MARTINO and E. VENTURA: A description of auto-fixed subgroups in a free group 1133

MARTIN LUSTIG and YOAV MORIAH: A finiteness result for Heegaard splittings 1165

STAVROS GAROUFALIDIS and LEV ROZANSKY: The loop expansion of the Kontsevich integral, the null-move and S-equivalence 1183

MICHAEL EISERMANN: Vassiliev invariants and the Poincaré conjecture. 1211

BORIS KHESIN, ALEXEI ROSLY and RICHARD THOMAS: A polar de Rham theorem 1231

NUMBER 6

STAVROS GAROUFALIDIS and ANDREW KRICKER: Finite type invariants of cyclic branched covers. 1247

D. AUROUX, S.K. DONALDSON, L. KATZARKOV and M. YOTOV: Fundamental groups of complements of plane curves and symplectic invariants. 1285

IGOR MINEYEV, NICOLAS MONOD and YEHUDA SHALOM: Ideal bicombings for hyperbolic groups and applications 1319

Young-EUN CHOI: Positively oriented ideal triangulations on hyperbolic three-manifolds. 1345

STÉPHANE BASEILHAC and RICCARDO BENEDETTI: Quantum hyperbolic invariants of 3-manifolds with $PSL(2,\mathbb{C})$-characters 1373

MASAMICHI TAKASE: A geometric formula for Haefliger knots. 1425

RONALD FINTUSHEL and RONALD STERN: Families of simply connected 4-manifolds with the same Seiberg–Witten invariants 1449

KIYOSHI IGUSA: Graph cohomology and Kontsevich cycles 1469

Volume Contents and Author Index Vol 43 (2004) III